

Amendments to the Claims:

The listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Cancelled)

2. (Currently Amended) An ink jet ink composition comprising water, a humectant, and a hyperbranched polymeric dye comprising a hyperbranched polymer having a dye chromophore pendant on the polymer chain wherein said hyperbranched polymer having a dye chromophore pendant on the polymer chain has the formula:



wherein:

HB is a polyamide, polyether, vinylic polymer, polyimine, polysiloxane, or polyurethane hyperbranched polymer core;

D is a dye moiety; and

n is an integer of at least 2.

3. (Cancelled)

4. (Original) The composition of Claim 2 wherein said HB is prepared by a chain polymerization of a monomer of the formula $M^1-R^1-M^2_m$ wherein (i) R^1 is a linear or branched alkyl, carbonyl, or aromatic moiety; (ii), M^1 and M^2 are reactive groups that react independently of each other in which M^1 is a polymerization group and M^2 is a precursor of a moiety M^{2*} which initiates the polymerization of M^1 as a result of being activated; and (iii), m is an integer of at least 1.

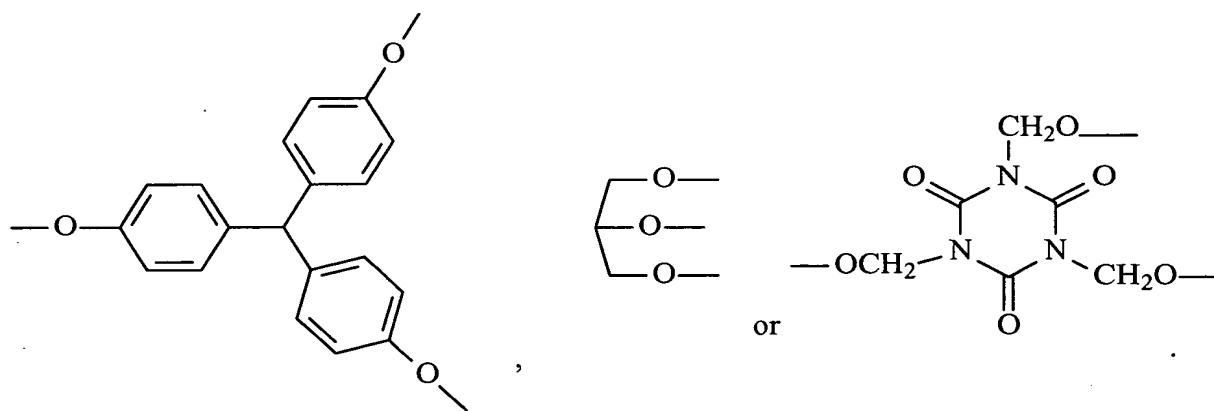
5. (Original) The composition of Claim 2 wherein said HB is prepared by a condensation or addition polymerization of a monomer of the formula $M^3-R^2-M^4_p$ wherein (i) R^2 is a linear or branched alkyl or aromatic moiety; (ii), M^3 and M^4 are groups that undergo a condensation or addition reaction; and (iii), p is an integer of at least 2.

6. (Currently Amended) The composition of Claim 2 wherein said HB is prepared by a condensation or addition polymerization of a monomer of the formula $R^2-M^5_q$ and $R^3-M^6_t$ wherein (i) R^2 is a linear or branched alkyl or aromatic moiety as defined above and R^3 is a linear or branched alkyl or aromatic moiety; (ii), M^5 and M^6 are groups that undergo a condensation or addition reaction; and (iii), q is an integer of at least 2 and t an integer of at least 3.

7. (Original) The composition of Claim 4 wherein M^1 is a non-substituted or substituted vinylic group, M^2 is X, $-CH_2X$ or $-CH(CH_3)X$ wherein X is Cl, Br, I, S-C(=S), YR^4R^5 or $-O-NR^4R^5$, Y=O or N, and R^4 and R^5 are each independently $-(CH_2)_r$ ($r = 1-12$), $-C_6H_5$, $-C(O)O$, or $C(O)$.

8. (Original) The composition of Claim 5 wherein M^3 and M^4 are each independently $-COOH$, $-OH$, $-C(O)Cl$, epoxy, anhydride, NH , or NH_2 , and R^2 is $-C_6H_3-$, or $-(CH_2)_s-C(R^6)-$ wherein R^6 is a linear or branched alkyl or aromatic group and s is an integer of 1-14.

9. (Original) The composition of Claim 6 wherein M^5 and M^6 are each independently $-COOH$, $-OH$, $-C(O)Cl$, epoxy, anhydride, NH or NH_2 , and R^3 is $-C_6H_4-$, $-C_6H_4-O-C_6H_4-$, $-C_6H_3$, $N(CH_2)_3-$, $-C_4H_8-$, $-C_6H_{10}-$,



10-18. (Cancelled)